

AMENDMENTS TO THE SPECIFICATION

Applicants respectfully request the Examiner to replace the numbered paragraphs as listed below in the application.

[0031] In this exemplary embodiment, the media system 200 includes a television/monitor 212, a video cassette recorder (VCR) 214, digital video disk (DVD) recorder/playback device 216, audio/video tuner 218 and compact disk player 220 coupled to the I/O bus 210. The VCR 214, DVD 216 and compact disk player 220 may be single disk or single cassette devices, or alternatively may be multiple disk or multiple cassette devices. They may be independent units or integrated together. In addition, the media system 200 includes a microphone/speaker system 222, video camera 224 and a wireless I/O control device 226. According to exemplary embodiments of the present invention, the wireless I/O control device 226 is a media system remote control unit that supports 3D pointing, has a minimal number of buttons to support navigation, and communicates with the entertainment system 200 through RF signals. For example, wireless I/O control device 226 can be a 3D pointing device which uses a gyroscope or other mechanism to define both a screen position and a motion vector to determine the particular command desired. A set of buttons can also be included on the wireless I/O device 226 to initiate the "click" primitive described below as well as a "back" button. In another exemplary embodiment, wireless I/O control device 226 is a media system remote control unit, which communicates with the components of the entertainment system 200 through IR signals. In yet another embodiment, wireless I/O control device 134 device 226 may be an IR remote control device similar in appearance to a typical entertainment system remote control with the added feature of a track-ball or other navigational mechanisms which allows a user to position a cursor on a display of the entertainment system 200.

[0041] Figure 6 shows a zoomed in view of Genre 3 that would be displayed if the user selects Genre 3 from Figure 5, e.g., by moving the cursor 508 over the area encompassed by the rectangle surrounding Genre 3 on display 212 and depressing a button on the input device. The interface can animate the zoom from Figure 5 to Figure 6 so that it is clear to the user that a zoom occurred. An example of such an animated zoom/transition effect is described below. Once the shape 516 that contains Genre 3 occupies most of the screen on display 212, the interface reveals the artists that have albums in the genre. In this example, seven different artists and/or their works are displayed. The unselected genres 515 that were adjacent to Genre 3 Genre 3 514 in the zoomed out view of Figure 5 are still adjacent to Genre 3 in the zoomed in view, but are clipped by the edge of the display 212. These unselected genres can be quickly navigated to by selection of them with selection pointer 508. It will be appreciated, however, that other exemplary embodiments of the present invention can omit clipping neighboring objects and, instead, present only the unclipped selections. Each of the artist groups, e.g., group 512, can contain images of shrunk album covers, a picture of the artist or customizable artwork by the user in the case that the category contains playlists created by the user.

[0049] Figure 9 shows a scene graph that contains basic zoomable interface elements which can be used to implement exemplary embodiments of the present invention, specifically it contains one camera node 900 and one layer node 902. The dotted line between the camera node 900 and layer node 902 indicates that the camera node 900 has been configured to render the children of the layer node 902 in the camera's view port. The attached display device 904 lets the user see the camera's view port. The layer node 902 has three children ~~nodes~~ nodes 906, 908 and 910 that draw a circle and a pair of ovals. The scene graph further specifies that a rectangle

is drawn within the circle and three triangles within the rectangle by way of nodes 912-918. The scene graph is tied into other scene graphs in the data structure by root node 920. Each node 906-918 has the capability of scaling and positioning itself relative to its parent by using a local coordinate transformation matrix. Figures 10(a) and 10(b) illustrate what the scene graph appears like when rendered through the camera at a first, zoomed out level of magnification and a second, zoomed in level of magnification, respectively.